AMCOM Pamphlet 702-1

**Product Assurance** 

# **Qualification of Sources of Supply**

Headquarters
US Army Aviation and Missile Command
Redstone Arsenal, AL 35898-5000
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DEPARTMENT OF THE ARMY HEADQUARTERS UNITED STATES ARMY AVIATION AND MISSILE COMMAND Redstone Arsenal, Alabama 35898-5000

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Product Assurance
QUALIFICATION OF SOURCES OF SUPPLY

FOR THE COMMANDER:

Chief of Staff

OFFICIAL:

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Secretary of the General Staff

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# TABLE OF CONTENTS

Chapter 1.	GENERAL PARAGRAP	Ή
Onapiei 1.	Purpose	1 2 3 4
Chapter 2.	AUTHORIZATION Place of Test Cost of Test Extension of Qualification Use of Prior Test Data	1 2 3 4
Chapter 3	REMOVAL AS APPROVED SOURCE MANUFACTURER Reasons for Removal Notification of Proposed Removal Notification of Removal	1 2 3
Chapter 4.	DETAILED PROCEDURES FOR REQUESTING QUALIFICATIO Initiation of Qualification Request	N 1 2 3 4
Chapter 5.	TESTING PROCEDURES Authorization for Conducting Test	1 2 3 4 5
Chapter 6.	REPORTS Test Reports Transmittal of Reports	1 2
Chapter 7.	NOTIFICATION OF RESULTS  Notification Failed Item Retest	1 2

## CHAPTER 1 GENERAL

# 1 Purpose.

- a. This handbook provides guidance and procedures for manufacturers and their authorized suppliers to be listed as authorized sources of supply for Missile items which require pre-contractual qualifications of suppliers in accordance with US Army Aviation and Missile Command (AMCOM) source control drawings and missile specifications.
- b. The material in this pamphlet is to be used in conjunction with AMCOM Regulation 702-1, Qualification Testing for Additional Sources.
- 2. <u>Objective</u>. In this guide we will discuss procedures for testing or other quality demonstration of an item which must be completed before manufacturer can be certified as a source of supply for AMCOM missile managed items.
- 3. <u>Application</u>. This procedure applies to AMCOM missile product configuration identification (PCI) wherein a manufacturer or supplier is cited as being qualified and contains provisions for a listing of approved sources.

## 4 Definitions.

As used in these provisions, the terms listed below shall have the meanings stated.

- (1) <u>Applicant.</u> The manufacturer or supplier making application for listing as an approved source of supply.
- (2) <u>Supplier</u>. Anyone authorized by the manufacturer to distribute the manufacturer's product. This also includes the supplier authorized by the manufacturer to rebrand and distribute the manufacturer's rebranded product under the supplier's own brand.
  - (3) Manufacturer. The actual producer (domestic or foreign) of a product.
- (4) <u>Product.</u> Includes materials, parts, components, subassemblies, assemblies, and equipment. The term "product", wherever used in this document, shall also encompass a family of products. A family of products is defined as all products of the same classification, design, constructions, material, type, etc., produced with the same production facilities, processes, and quality of material, under the same management and quality controls, but having the acceptable variety of physical and functional characteristics defined and specified in the applicable AMCOM document.

- (5). Qualification. The process by which products of manufacturers and suppliers are examined and tested and then identified in the product configuration identification as approved items of supply and the manufacturer or supplier as an approved source of supply. The purpose of examinations and tests prior to an acquisition is to assure availability of products that are critical in their application to a design. Source control drawings and many missile specifications are based on performance requirements. As a result the possible variations in design and quality and the nature of the requirements and test for some products are such that it is impractical to acquire products based solely on acceptance tests.
- (6) Approved Source of Supply Listing. The fact that an item has been examined, tested, and identified in an AMCOM missile document signifies only that at the time of examination and test the manufacturer's item met specification requirements. Inclusion of an item or a source control document does not in any way, relieve the manufacturer or supplier from its obligation to deliver items meeting all stated specification requirements. Acceptability of items is not guaranteed based solely on the listing in a source control document since quality conformance inspections must be performed.

#### **CHAPTER 2**

#### **AUTHORIZATION**

- 1. <u>Place of Test.</u> Tests will be conducted at the place specified in the letter of authorization.
- 2. <u>Cost of Tests.</u> The letter authorizing the tests will state whether the cost of tests is to be borne by the government or by the applicant. The cost to the applicant, if any, will also be stated in the authorization letter.
- 3. Extension of Qualification. Except as provided herein, qualification of a product or of a family of products shall apply only to the products that are manufactured at the plant, which produced, examined, and tested the sample. Extension of qualification applies only to products of original manufacturers. The US Army Aviation and Missile Command may extend qualification to the named product or family of products produced by other plants of the manufacturer, when it has been determined that both of the following conditions exist:
- a. By government examination or test of the products of such other plants that it is at least equal in all aspects (i.e., produced under the same conditions as the original qualified item: same process, materials, construction, design, part number, and missile specifications) to that of the qualified product.
- b. That the quality control and processing at the other plants are such that the products produced there are at least equal in all aspects to the qualified product. Ordinarily, the determination made under these subparagraph will be based on inspection by a government team of the plant and, where required, quality control and processing procedures.
- 4. <u>Use of Prior Test Data.</u> Test data generated prior to authorization of, or outside the purview of, qualification tests (e.g., from first article tests) may be considered; however, the US Army Aviation and Missile Command has final authority in determination of its validity and applicability for usage in lieu of qualification test data. The government reserves the right to set final qualification standards and render final qualification decisions in all cases.

#### **CHAPTER 3**

#### REMOVAL AS APPROVED SOURCE MANUFACTURER

- 1. Reason for Removal. A manufacturer will be removed for one or any one of the following reasons:
- a. The product offered under contract does not meet the requirements of the specification or drawing.
  - b. The manufacturer no longer produces the item.
  - c. The manufacturer requests removal from the approved source of supply listing.
- d. The requirements of a revised or amended specification or drawing differ significantly from the previous issue so that existing test data are no longer applicable for determining compliance of the product with the revised or amended requirements.
- e. The manufacturer has failed to notify the US Army Aviation and Missile Command of change in the manufacturer design, materials, or processes.
- f. The manufacturer has not complied with the requirements for certification that the listed product(s) is still available from the listed plant, can be produced under the same conditions as originally qualified; i.e., same process, materials, construction, design, manufacturer's part number, or designation; and meets the requirements of the current issue of the missile specification or drawing.
- 2. <u>Notification of Proposed Removal.</u> The Manufacturer will be notified of his /her proposed removal as an approved source of supply and the reasons therefore, and shall be granted at least 14 days from date of the notifying letter in which to respond.
- 3. <u>Notification of Removal.</u> After determination has been made to remove a manufacturer as an approved source of supply, notice will be forwarded to that manufacturer and it's product will be deleted from the missile specification or drawing.

#### **CHAPTER 4**

#### DETAILED PROCEDURE FOR REQUESTING QUALIFICATION

- 1. <u>Initiation of Qualification Request.</u> Anyone wishing to be qualified as a source of supply for missile items requiring precontractual qualification of suppliers shall make a request in writing to have their products subjected to qualification testing. Submission of a qualification request does not guarantee approval. The government retains the right to request additional information, technical briefings, and/or perform a site visit of offeror's facility if deemed necessary to facilitate qualification. Qualification requests shall be addressed to: Commander, US Army Aviation and Missile Command, Redstone Arsenal, AL 35898-5040, ATTN: AMSAM-CM, and shall contain the following applicable information:
- a. Number and date of missile specification or drawing under which tests are desired and type, grade, class, or other designation of the product.
- b. Whether the qualification request is for the same, a similar, or a new Missile part/item.
- c. Applicant's brand designation for the product and exact location (including complete street address) of the plant at which the product was manufactured. When the applicant is a distributor, the name and plant location of the actual manufacturer shall be included.
  - d Brochures or a synopsis of the offeror's capabilities.
- e. Complete set of drawings, including forging/casting data and drawing when applicable. If the missile item is a critical safety item, the drawings shall be annotated with a critical safety identifier and shall further identify those specific characteristics of the item that are critical (i.e., dimension material composition, finish, etc.).
- f. Quality documentation, procedures, inspection and test requirements currently utilized for, or proposed for, each missile part/item for which qualification is desired. Copies of the specific Quality Program/Inspection System Plan should be provided for evaluation.
- g. Process, materials, dimensional characteristics that must be controlled and the methodology used in controlling these processes and materials.

- h. Identification of vendors and sub-vendors for forging, castings, exotic materials, coatings or special processes that need to be closely controlled to ensure quality of delivered items, along with the methods and procedures used as controls.
- i. Certification that the submitted missile item is the same form, fit, and function as the original item.

Contractor and Government Entity (CAGE) Code for manufacturers, if assigned.

- k. Brief description of manufacturing processes and control utilized if classified as newly developed item.
- I. A test plan that clearly demonstrates how physical and functional characteristics of the offered item meet government specifications/requirements. (Test plans are subject to government approval.)
- m. Test reports and supporting data if the applicant has reason to believe from actual tests (within limits of test equipment commonly available, unless otherwise specified) that the product conforms to the applicable specification.
- 2. <u>Commercial Testing.</u> If commercial testing of the product is proposed, the following should be provided:
- a. Location of plant or other facility at which tests are to be performed If more than one facility is available, list in the order of applicant's preference.
- b. List and description of testing equipment proposed to be used including the following (with initial application only):
  - (1) Applicable Missile specification paragraph or drawing note number.
- (2) Equipment name and manufacturer including type or model number and serial or inventory number.
- (3) Equipment accuracy, limits, and latest date and place of calibration; frequency of calibration; and (when specifically requested) tractability of calibration to national or other recognized standards.
- 3. <u>Certification of the Applicant.</u> Applicant should certify that he/she:
  - a. Agrees to be bound by all of the provisions and terms set forth in this document.

- b. Is, or is not, a small business concern as defined by Section 3 of the Small Business Act.
- c. Is the actual manufacturer of the product or a supplier authorized by the manufacturer to rebrand and distribute the product under his/her own brand and designation. A supplier who rebrands shall furnish certification from the actual manufacturer of the product, or a supplier authorized to rebrand shall furnish certification from the actual manufacturer that he is authorized to rebrand and distribute the product with his/her own brand designation.
- 4. <u>Similar Part/Items.</u> An item that is similar to an item previously provided to the original equipment manufacturer (OEM) or the Department of Defense (DOD). A company may be considered a qualified source based on the capability, engineering skills, and manufacturing knowledge that has been demonstrated by having made a similar item. The offeror shall provide the following:
- a. Brochure or a synopsis of offeror's capabilities, with a facilities list showing plant equipment, machining, special tooling, fixtures, etc.
- b. A statement that the offeror is a non-manufacturing source or the actual manufacturer.
- c. A complete set of drawings for the similar missile item, including forging/casting data and drawings when applicable.
- d. A complete set of drawings for the original item, including forging/casting data and drawings when applicable.
- e. Identification of differences between the similar part/item and the original part/item for which the offeror is requesting source approval.
- f. If the missile item is a critical safety item, drawings shall be annotated with a critical safety item identifier and shall further identify these specific characteristics of the item that are critical (i.e., dimension, material composition, finish, etc.)
- g. Copies of the most recent purchase orders, shipping documents, etc., for the similar item to the OEM or proof of sale to DOD.
- h. Quality documentation, procedures, inspection, and test requirements, currently utilized for, or proposed for, each part/item for which qualification is desired. Copies of the quality Program/Inspection System Plan should be provided for evaluation.

- i. Process, material, and dimensional characteristics that must be controlled and the methodology used in controlling these processes, materials, and dimensional characteristics.
- j. Identification of vendors and sub-vendors for forgings, castings, exotic materials, coatings, or delivered items, along with the methods and procedures used as controls.
- k. Certification that the submitted missile part/item is the same fit, form, and function as the original part.
- I. Indicate contract and government entity code (CAGE) for manufacturer, if assigned.
- m. Listing an explanation of any quality deficiency reports that have been issued for items being considered.

### **CHAPTER 5**

#### **TESTING PROCEDURES**

1. <u>Authorization for Conducting Test.</u> The US Army Aviation and Missile Command will decide which method of qualification testing (government or commercial) will be utilized.

# 2. Government Testing.

- a. The product shall be forwarded by the applicant for test in accordance with the shipping instructions furnished in the letter authorizing the tests.
- b. The product must be accompanied by adequate operating instructions so that the tests may be properly conducted without undue delay. Testing will be undertaken as promptly as practicable after authorization.
  - c. Time of test will be set at the convenience of the government.
- d. The applicant may be permitted to make repairs and replacements after the product has been received at the US Army Aviation and Missile Command or place of test, prior to test, provided that it is evident that such repairs or replacements are required as a result of damage in shipment.
- 3. <u>Commercial Testing.</u> If the US Army Aviation and Missile Command authorizes commercial testing, it will determine, upon the basis of the application and any additional information which may be made available, if on-site inspection is required, whether or not the facilities proposed by the applicant to be used for the tests are suitable, and whether or not the applicant in all other respects complies with the requirements of these provisions governing qualification. Successful applicants will be provided written authorization for conducting the qualification tests. The qualification testing, which may be conducted only after receipt of authorization, may be monitored by a government representative designated by the US Army Aviation and Missile Command. The offeror will provide the Competition Management Office ten (10) working days' notice of conduct of the test to include the testing facility name, address, telephone number, point of contact, date, and time qualification tests are scheduled.

# 4. Test Samples. The applicant shall

a. Supply missile items for tests, which were produced utilizing the manufacturer's normal production facilities, techniques, and controls.

- b. Supply products, which meet the requirements of the specification in every respect.
- 5. <u>Costs.</u> Samples for testing shall be supplied by the applicant at no cost to the government. In accordance with Public Law 98-525 as amended, the cost of conducting the testing will be borne by the government if the offeror is a small business concern, the number of qualified sources is fewer than two, and a determination is made by the Commanding General, AMCOM, or his designated representative that additional qualified sources or products will likely result in an overall cost savings from increased competition sufficient to amortize the testing costs incurred by the government within a reasonable period of time. The cost of the test to be borne by the applicant, if any, will be stated in the letter authorizing the test and will be provided to the government by certified check. The government will not be liable for any expense resulting from:
  - a Shipment of the samples to or from the test site.
  - b. Damage during test.
  - c. Loss of sample during testing.

#### **CHAPTER 6**

#### **REPORTS**

- 1 <u>Test Reports.</u> Test reports shall be prepared as follows:
- a. Cover or Title Page. The cover or title page shall include the following information:
  - (1) Date of report.
  - (2) Test report number assigned by testing laboratory.
- (3) Specification or drawing title, number and date, including amendments and sheet numbers and dates.
- (4) Name, mailing address, and telephone number of the manufacturer, and complete address of manufacturing plant location if different from mailing address.
- (5) Name, mailing address, and telephone number of facility where tests were performed.
  - (6) Proprietary marking, if applicable.
- b. Abstract. A single page abstract covering a synopsis of the performance and noting the numbers of samples, which failed and passed the tests.
  - c. Basic Section. The basic section shall contain the following
    - (1) A listing and description of all test equipment used, including the following:
    - (a) Applicable specification paragraph or drawing note.
- (b) Equipment name and manufacturer, including type of model and serial or inventory number.
- (c) Date of calibration, if applicable, and trace ability of calibration and national or other recognized standards.
- (2) Summary test data sheets with original signature of testing official showing specification requirements, test results, and whether the unit passed or failed. The US Army Aviation and Missile Command will retain original data sheets.

- (3). Curves, graphs, photographs, or other material pertinent to the qualification process.
- d. Page Numbering. Test report pages shall be numbered and the report shall be signed by a responsible officer or authorized representative of the testing agency. Report shall be prepared whether the samples pass or fail the tests required.
- 2. <u>Transmittal of Reports</u>. Test reports shall be forwarded to the US Army Aviation and Missile Command, Competition Management Office, ATTN: AMSAM-CM. Commercial test results shall be transmitted by a letter from the offeror stating purpose of tests (qualification, qualification retention, requalification), authorization for testing, and any other information, which the releasing company official believes to be of significance to government evaluation.

#### **CHAPTER 7**

#### **NOTIFICATION OF RESULTS**

- 1. <u>Notification</u>. Test results will be analyzed by appropriate personnel to determine if the missile product is qualified. The applicant will be notified concerning the results and whether or not the manufacturer is to be listed as a source in the source control document. If the item fails to meet qualification requirements, explicit reasons shall be provided the applicant.
- 2. <u>Failed Item Retest.</u> The government has the right of final approval on course of action to be pursued following failure of an offered item in qualification testing.